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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,182	11/25/2003	Massimo Canali	Q78651	4213
23373	7590	01/13/2006		
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			EXAMINER DUONG, OANH L	
			ART UNIT 2155	PAPER NUMBER

DATE MAILED: 01/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

SP

Office Action Summary

Application No.

10/720,182

Applicant(s)

CANALI ET AL.

Examiner

Oanh Duong

Art Unit

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>02/26/04</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. Claims 1-9 are presented for examination.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted was filed on February 26, 2004. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Objections

3. Claims 3, 5, and 7 are objected to because of the following informalities:
4. Claim 3 recites the limitations "said Corba Strategy Gateway interface" in lines 17-18, "the operations" in line 19, and "the specific characteristics" in line 20. There are insufficient antecedent basis for those limitations in the claim. For the purpose of examination, examiner assumes "said Corba Strategy Gateway interface" is "the interface".
5. Claim 5 recites the limitation "said methods" in line 2. There is insufficient antecedent basis for this limitation in the claim.
6. Regarding claim 7, some typographical error has been found (i.e., "methof" in line 3 should be "method").

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1, 2 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Regarding claims 1, 2 and 7, the phrases "namely" and "such as" renders the claims indefinite because it is unclear whether the limitations following the phrases are part of the claimed invention. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. Claim 8 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

10. Claim 8 is not limited to tangible embodiments. The claim recited "Computer program comprising..." is nonstatutory. Since claim 8 recited "Computer program comprising..." is just limited to a functional descriptive materials" consists of computer

program per se, instead of being defined as including tangible embodiments (i.e., a computer readable storage medium such as memory device, storage medium, etc.). As such, the claim is not limited to statutory subject matter and is therefore nonstatutory.

To overcome this type of 101 rejection, examiner suggests applicants to amend the claim to include computer readable storage medium to store computer codes (for example, the claim should be amended as "A computer program comprising computer program code means embodied in a computer readable storage medium, when executed by computer, to perform all method steps of claim 1..." see MPEP 2106 section V. DETERMINE WHETHER THE CLAIMED INVENTION COMPLIES WITH 35 U.S.C. 101 under subsection 1. Nonstatutory subject matter.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1-2, and 7-9 are rejected under 35 U.S.C. 102(b) as being anticipated by **Davis** et al. (hereafter, Davis) U.S. Pub. No. **2002/0004828 A1**.

13. Regarding claim 1, **Davis** teaches method for setting up a generic protocol relationship between network elements, namely a Network Manager (NMS application

201) and Network Element agent (EMS application 501), in a telecom network (telecommunications network, page 3 paragraph [0038] (Figs 4-5), wherein

an interface is created between Common Element Manager (i.e., EMS 202, Fig. 4) and Network Management layers (NMS application 201, Fig. 4) (i.e., *functional interface is characterized by creating a name, syntax, parameter lists and associated callback method for selected function(s)*, page 6 paragraph [0076]), to be protocol and model independent, as a generic layer for syntactical adaptation between Network Manager and network element (i.e., *regardless of the network element's type and protocol*, page 6 paragraph [0082]), without taking into account the semantic of the exchanged messages (i.e., *"COBBAIDL compiler is used to facilitate the establishment of the correspondences between element-dependent and element-independent upstream network management message, and between element-dependent and element-independent downstream network management messages"*, page 9 paragraph [0128]);

said interface being composed by a number of generic methods (i.e., *"the functional interface is characterized by creating name, Syntax, parameter list and associated callback method for the selected function"*, page 6 paragraph [0076]-page 7 paragraph [0115]) hiding different protocol operations (i.e., *"mapping the upstream element dependent network management message into a upstream element-independent network management message selected from a core set of upstream element-independent network management messages, and into a common element – independent message protocol"*, page 8 paragraph [0125]).

14. Regarding claim 2, **Davis** teaches method according to claim 1, wherein said generic methods:

describe common operations, such as GET, SET, CREATE, DELETE, of the protocol used for communication between Network Manager and Network Element (i.e., *"the basic fiber optic device network management functions comprises the functions of retrieving, entering, editing and removing"*, page 6 paragraph [0076],

also comprise a method for managing Network Element common service, such as alarm (i.e., *"an alarm"*, page 3 paragraph 41) and NE management (i.e., *provide the core network management message common to all NEs in the Element Management system*, page 10 paragraph [0135]).

15. Claim 7 recites a telecom network comprising means for implementing the method, taught by the prior art as identified on claim 1, discussed above, same rationale of rejection is applicable.

16. Claim 8 recites computer program comprising computer program code means adapted to perform the method, taught by prior art as identified on claim 1, discussed above, same rationale of rejection is applicable.

17. Claim 9 recites computer readable medium having a program recorded thereon, said computer readable medium comprising computer program code means adapted to

perform the method, taught by prior art as identified on claim 1, discussed above, same rationale of rejection is applicable.

Claim Rejections - 35 USC § 103

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. Claims 3-4 are is rejected under 35 U.S.C. 103(a) as being unpatentable over **Davis**, in view of **Natsukawa et al.** (hereafter, **Natsukawa**), JP Pub. No. **2000242584 A**.

20. Regarding claim 3, **Davis** teaches method according to claim 1, wherein said Corba Strategy Interface (i.e., *functional interface*, page 6 paragraph [0076]):

is created starting from checking which are the operations permitted by each single protocol and which are the specific characteristics of each language (page 4 paragraphs [0052]-[0054] and page 7 paragraphs [0115]-[0116]).

is defined as offering the minimal functionality provided by the more complex protocol, SNMP, mainly/meaning containing generic GET and SET methods (page 4 paragraph [0054] and page 6 paragraph [0076]).

Davis does not explicitly teach CMIP protocol.

Natsukawa teaches the network management system wherein an interface conversion method is provided (see abstract). **Natsukawa** teaches CMIP protocol is used (page 1 paragraph [0001]).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the CMIP protocols of **Natsukawa** in the element management system in **Davis**. One would be motivated to do so to simplify the procedure which is needed for a client side especially, its interface conversion approach and its processing program (Natsukawa, page 1 paragraph [0001]).

21. Regarding claim 4, **Davis** teaches method according to claim 2, wherein said Corba Strategy Interface (i.e., *functional interface*, page 6 paragraph [0076]):

is created starting from checking which are the operations permitted by each single protocol and which are the specific characteristics of each language (page 4 paragraphs [0052]-[0054] and page 7 paragraphs [0115]-[0116]).

is defined as offering the minimal functionality provided by the more complex protocol, SNMP, mainly containing generic GET and SET methods (page 4 paragraph [0054] and page 6 paragraph [0076]).

Davis does not explicitly teach CMIP protocol.

Natsukawa teaches the network management system wherein an interface conversion method is provided (see abstract). **Natsukawa** teaches CMIP protocol is used (page 1 paragraph [0001]).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the CMIP protocols of **Natsukawa** in the element management system in **Davis**. One would be motivated to do so to simplify the procedure which is needed for a client side especially, its interface conversion approach and its processing program (Natsukawa, page 1 paragraph [0001]).

22. Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Davis**, in view of **Natsukawa**, and further in view of **Warren**, U.S. Pub. No. **2003/0204612 A1**.

23. Regarding claim 5, **Davis** teaches method according to claim 3, wherein said methods are defined using CORBA IDL language (Interface Data Language) (i.e., "using CORBAIDL, a structure is defined for function's input parameter", page 6 paragraph [0077]).

the combination of **Davis and Natsukawa** does not explicitly teach parameters, common meta-language commands, written in XML language.

Warren teaches system and method for facilitating communication, managing and controlling in a network wherein at least one device command is translated into different second protocol (see abstract). **Warren** teaches parameters, common meta-language commands, written in XML language (page 2 paragraph [0025] and page 4 paragraph [0042]).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate XML language of **Warren** in the process of creating/defining the functional interface in **Davis and Natsukawa**. One would be motivated to do so to allow designers to create their own customized tags, enabling the definition, transmission, validation, and interpretation of data between applications and organizations.

24. Regarding claim 6, **Davis** teaches method according to claim 4, wherein said methods are defined using CORBA IDL language (Interface Data Language) (i.e., "using CORBAIDL, a structure is defined for function's input parameter", page 6 paragraph [0077]).

The combination of **Davis and Natsukawa** does not explicitly teach parameters, common meta-language commands, written in XML language.

Warren teaches system and method for facilitating communication, managing and controlling in a network wherein at least one device command is translated into different second protocol (see abstract). **Warren** teaches parameters, common meta-language commands, written in XML language (page 2 paragraph [0025] and page 4 paragraph [0042]).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate XML language of **Warren** in the process of creating/defining the functional interface in **Davis and Natsukawa**. One would be motivated to do so to allow designers to create their own customized tags, enabling the

definition, transmission, validation, and interpretation of data between applications and organizations.

Conclusion

25. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- a. Babka et al., US Pub. No. 2003/0028679 A1, discloses system and method for managing video network device.
- b. Theeten, US 6,968,553 B1, discloses element manager common gateway architecture system and method.
- c. Kiriha et al, US 6,490,255 B1, discloses network management system.
- d. Son, KR 2002055213 A, discloses interface apparatus between NMS and EMS of network management system and method therefor.
- e. Allavarpu et al., US 6,915,324 B1, discloses generic and dynamic mapping of abstract syntax notation to and from interface definition language for network management.
- f. Barker et al., US 6,363,421 B2, discloses method for computer Internet remote management of telecommunication network element.
- g. Jones et al., US 6,044,407, discloses interface for translating an information message from one protocol to another.
- h. Li et al., US 2005/0108387 A1, discloses system and apparatus for network management system using presence and instant message techniques.

i. Low, US 2003/0101251 A1, discloses customizable element management system and method using element modeling and protocol adapters.

26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Oanh Duong whose telephone number is (571) 272-3983. The examiner can normally be reached on Monday- Friday, 2:00PM - 10:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571) 272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Oanh Duong

January 4, 2006